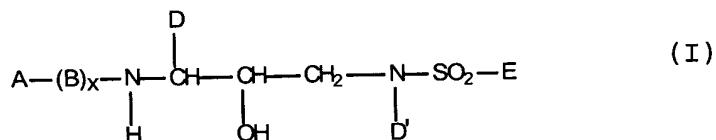


Amendment to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims:

Claim 1 (currently amended): A compound of formula I:



wherein:

A is selected from the group consisting of H, Het, ~~R¹-Het~~, -R¹-C₁-C₆ alkyl, which may be optionally substituted with one or more groups selected from the group consisting of hydroxy, C₁-C₄ alkoxy, Het, ~~O-Het~~, -NR²-CO-N(R²) (R²) and -CO-N(R²) (R²); and ~~R¹-C₂-C₆ alkenyl~~, which may be optionally substituted with one or more groups selected from the group consisting of hydroxy, C₁-C₄ alkoxy, Het, ~~O-Het~~, ~~NR²-CO-N(R²) (R²)~~ and ~~CO-N(R²) (R²)~~; each R¹ is independently selected from the group consisting of -C(O)-, -S(O)₂-, -C(O)-C(O)-, -O-C(O)-, -O-S(O)₂, -NR²-S(O)₂-, -NR²-C(O)- and -NR²-C(O)-C(O)-;

each Het is independently selected from the group consisting of C₃-C₇ cycloalkyl; C₅-C₇ cycloalkenyl; C₆-C₁₀ aryl; and 5-7 membered saturated or unsaturated heterocycle, containing one ~~or more heteroatoms~~ heteroatom selected from N, N(R²), O, S and S(O)_n, wherein said heterocycle may optionally be benzofused; and wherein any member of said Het may be optionally substituted with one or more substituents selected from the group consisting of oxo, -OR², -R², -N(R²)(R²), -R²-OH, -CN, -CO₂R², -C(O)-N(R²)(R²), -S(O)₂-N(R²)(R²), -N(R²)-C(O)-R₂, -C(O)-R², -S(O)_n-R², -OCF₃, -S(O)_n-Ar, methylenedioxy, -N(R²)-S(O)₂(R²), halo, -CF₃, -NO₂, Ar and -O-Ar;

each R² is independently selected from the group consisting of H and C₁-C₃ alkyl optionally substituted with Ar; with the proviso that when R² is C₁-C₃ alkyl substituted with Ar, said Ar may not be substituted with an Ar-containing moiety;

B, when present, is -N(R²)-C(R³)(R³)-C(O)-;

x is 0 or 1;

each R³ is independently selected from the group consisting of H, Het, C₁-C₆ alkyl, C₂-C₆ alkenyl, C₃-C₆ cycloalkyl and C₅-C₆ cycloalkenyl, wherein any member of said R³, except H, may be optionally substituted with one

or more substituents selected from the group consisting of $-OR^2$, $-C(O)-NH-R^2$, $-S(O)_n-N(R^2)(R^2)$, Het, $-CN$, $-SR^2$, $-CO_2R^2$, $NR^2-C(O)-R^2$;

each n is independently 1 or 2;

D and D' are independently selected from the group consisting of Ar; C₁-C₄ alkyl, which may be optionally substituted with one or more groups selected from C₃-C₆ cycloalkyl, $-OR_2$, $-R^3$, $-O-Ar$ and Ar; C₂-C₄ alkenyl, which may be optionally substituted with one or more groups selected from the group consisting of C₃-C₆ cycloalkyl, $-OR^2$, $-R^3$, $-O-Ar$ and Ar; C₃-C₆ cycloalkyl, which may be optionally substituted with or fused with Ar; and C₅-C₆ cycloalkenyl, which may be optionally substituted with or fused with Ar;

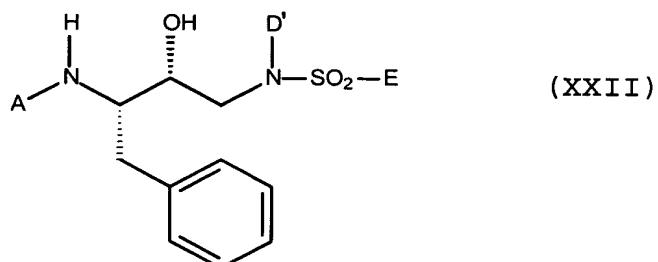
each Ar is independently selected from the group consisting of phenyl; 3-6 membered carbocyclic ring and 5-6 membered heterocyclic ring containing one or more heteroatoms selected from O, N, S, S(O)_n and N(R²), wherein said carbocyclic or heterocyclic ring may be saturated or unsaturated and optionally substituted with one or more groups selected from the group consisting of oxo, $-OR^2$, $-R^2$, $-N(R^2)(R^2)$, $-N(R^2)-C(O)-R^2$, $-R^2-OH$ C₁-C₃ alkyl substituted with -OH and optionally substituted

with Ar, -CN, -CO₂R², -C(O)-N(R²)(R²), halo and -CF₃;

E is selected from the group consisting of Het; O-Het; Het-Het; -O-R³; -NR²R³; C₁-C₆ alkyl, which may be optionally substituted with one or more groups selected from the group consisting of R⁴ and Het; C₂-C₆ alkenyl, which may be optionally substituted with one or more groups selected from the group consisting of R⁴ and Het; C₃-C₆ saturated carbocycle, which may optionally be substituted with one or more groups selected from the group consisting of R⁴ and Het; and C₅-C₆ unsaturated carbocycle, which may optionally be substituted with one or more groups selected from the group consisting of R⁴ and Het; and

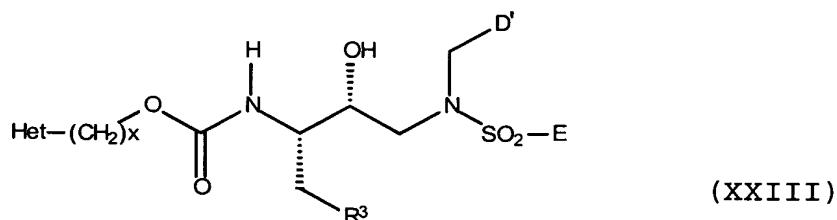
each R⁴ is independently selected from the group consisting of -OR², -C(O)-NHR², -S(O)₂-NHR², halo, -NR²-C(O)-R² and -CN.

Claim 2 (original): The compound according to claim 1, characterized in that said compound has the structure of formula XXII:



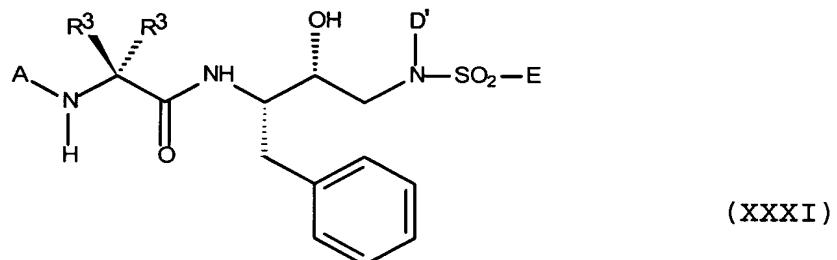
and A, D' and E are defined as in claim 1.

Claim 3 (original): The compound according to claim 1, characterized in that said compound has the structure of formula XXIII:



and x, Het, R³, D' and E are defined as in claim 1.

Claim 4 (original): The compound according to claim 1, characterized in that said compound has the structure of formula XXXI:



and A, R³, D' and E are defined as in claim 1.

Claim 5 (currently amended): A compound of formula I, wherein:

A is selected from the group consisting of H, -R¹-Het, -R¹-C₁-C₆ alkyl, which may be optionally substituted with one or more groups selected from the group consisting of hydroxy, C₁-C₄ alkoxy, Het and -O-Het, and -R¹-C₂-C₆ alkenyl, which may be optionally substituted with one or more groups selected from hydroxy, C₁-C₄ alkoxy, Het and -O-Het;

each R¹ is independently selected from the group consisting of -C(O)-, -S(O)₂-, -C(O)-C(O)-, -O-CO-, -O-S(O)₂- and -NR²-S(O)₂-;

each Het is independently selected from the group consisting of C₃-C₇ cycloalkyl; C₅-C₇ cycloalkenyl; C₆-C₁₀ aryl; and 5-7 membered saturated or unsaturated heterocycle, containing one or more heteroatoms heteroatom selected from N, O and S, which may optionally be benzofused; wherein any member of said Het may be optionally substituted with one or more substituents selected from the group consisting of oxo, -OR², -R², -N(R²)₂, -R²-OH, -CN, -CO₂R², -C(O)-N(R²)₂ and -S(O)₂-N(R²)₂;

each R² is independently selected from the group consisting of H and C₁-C₃ alkyl;

B, when present, is -NH-CH(R³)-C(O)-;

x is 0 or 1;

R³ is selected from the group consisting of Het, C₁-C₆ alkyl, C₂-C₆ alkenyl, C₃-C₆ cycloalkyl and C₅-C₆ cycloalkenyl, wherein any member of said R³ may be optionally substituted with one or more substituents selected from the group consisting of -OR², -C(O)-NH-R², -S(O)_n-N(R²)₂, Het and -CN;

n is 1 or 2;

D and D' are independently selected from the group consisting of Ar; C₁-C₄ alkyl, which may be optionally substituted with C₃-C₆ cycloalkyl or Ar; C₂-C₄ alkenyl, which may be optionally substituted with C₃-C₆ cycloalkyl or Ar; C₃-C₆ cycloalkyl, which may be optionally substituted or fused with Ar; and C₅-C₆ cycloalkenyl, which may be optionally substituted or fused with Ar; ~~with the proviso that when D is attached to N, D may not be methyl or C₂ alkenyl,~~

Ar is selected from the group consisting of phenyl; 3-6 membered carbocyclic ring and 5-6 membered heterocyclic ring containing one or more heteroatoms selected from O, N and S, wherein said carbocyclic or heterocyclic ring may be saturated or unsaturated and optionally substituted with one or more groups selected from the group consisting of oxo, -OR², -R², -N(R²)₂,

-N(R²)-C(O)R², -R²-OH, -CN, -CO₂R², -C(O)-N(R²)₂, halo and

-CF₃;

E is selected from the group consisting of Het;
-O-R³; -NR²R⁵; C₁-C₆ alkyl, which may be optionally substituted with one or more R⁴ or Het; C₂-C₆ alkenyl, which may be optionally substituted with one or more R⁴ or Het; C₃-C₆ saturated carbocycle, which may optionally be substituted with one or more R⁴ or Het; and C₅-C₆ unsaturated carbocycle, which may optionally be substituted with one or more R⁴ or Het;

each R⁴ is independently selected from the group consisting of -OR², -C(O)-NHR², -S(O)₂-NHR², halo and -CN;
and

each R⁵ is independently selected from the group consisting of H and R³, ~~with the proviso that at least one R⁵ is not H.~~

Claim 6 (canceled).

Claim 7 (original): The compound according to claim 3,
wherein:

R³ is selected from the group consisting of C₁-C₆ alkyl, C₂-C₆ alkenyl, C₅-C₆ cycloalkyl, C₅-C₆ cycloalkenyl and a 5-6 membered saturated or unsaturated

heterocycle, wherein any member of said R³ may optionally be substituted with one or more substituents selected from the group consisting of -OR², -C(O)-NH-R², -S(O)_nN(R²)(R²), -S(O)_nN(R²)(R²), Het, -CN, -SR², -C(O)₂R², NR²-C(O)-R²; and

D' is selected from the group consisting of C₁-C₃ alkyl and C₃ alkenyl, wherein said alkyl or alkenyl may optionally be substituted with one or more groups selected from the group consisting of C₃-C₆ cycloalkyl, -OR², -O-Ar and Ar.

Claims 8-10 (canceled).

Claim 11 (original): The compound according to claim 1, wherein said compound has a molecular weight less than or equal to about 700 g/mol.

Claim 12 (original): A compound according to claim 11, wherein said compound has a molecular weight less than or equal to about 600 g/mol.

Claims 13-15 (canceled).

Claim 16 (currently amended): A pharmaceutical composition effective against viral infection comprising a pharmaceutically effective amount of a compound

according to any one of claims 1-4 and ~~13-14~~ and a pharmaceutically acceptable carrier, adjuvant or vehicle.

Claim 17 (original): The pharmaceutical composition according to claim 16, further comprising an additional anti-viral agent.

Claim 18 (currently amended): A method of using a compound according to any one of claims 1-4 and ~~13-14~~ as a therapeutic agent against viral infection, said virus requiring an aspartyl protease for an obligatory life cycle event.

Claim 19 (original): The method according to claim 18, wherein said virus is HIV-1, HIV-2, or HTLV.

Claim 20 (currently amended): The use according to any one of claims 1-4 and ~~13-14~~, for inhibiting enzymatic activity in an aspartyl protease.

Claim 21 (original): The use according to claim 20, wherein said aspartyl protease is HIV protease.

Claim 22 (original): A method for preventing HIV infection in a mammal comprising the step of administering to said mammal a pharmaceutically effective

amount of a pharmaceutical composition according to claim 16 or 17.

Claim 23 (original): A method for treating HIV infection in a mammal comprising the step of administering to said mammal a pharmaceutically effective amount of a pharmaceutical composition according to claim 16 or 17.

Claim 24 (original): The method according to claim 22 or 23, wherein said step of administering comprises oral administration or administration by injection.

Claims 25-27 (canceled).